

Listing of Claims:

1. (Currently Amended) A medical treatment instrument used for coagulating and cutting a patient's body tissue, the medical treatment instrument comprising:

5 a treatment portion, which is arranged at a tip of the treatment instrument, and which comprises a grasp portion including a pair of grasp members, which are openable and closeable with respect to each other, for grasping the patient's body tissue;

10 an operating portion which is arranged at a proximal end of the treatment instrument, and which is operable to open and close the pair of grasp members;

15 a heat generating portion which is provided at a first grasp member of the pair of grasp members, portion, and which generates heat in accordance with current supplied thereto; ~~to coagulate the patient's body tissue grasped between the grasp members;~~ and

20 a cutting portion member which is disposed at the first grasp portion ~~to~~ in contact with the heat generating portion and projecting toward a second grasp member of the pair of grasp members, and which is heated by the heat generating portion to cut the patient's body tissue grasped between the grasp members;

wherein the cutting member is shaped so as to be capable of cutting the patient's body tissue only when the heat generating portion is activated.

Claims 2-6 (Canceled).

7. (Withdrawn) The treatment instrument according to
claim 1, wherein the treatment instrument comprises a surgical
operation instrument adapted for use in an endoscopy operation;
wherein the surgical operation instrument comprises an
5 insert portion to be inserted into the patient's body;
wherein the treatment portion is disposed at a distal end of
the insert portion; and
wherein the operating portion is disposed at the proximal
end of the insert portion.

8. (Withdrawn) The treatment instrument according to
claim 1, wherein each of the grasp members comprises a curved
portion that is curved substantially in an arc shape.

9. (Withdrawn) The treatment instrument according to
claim 1, wherein the heat generating portion is connected to
temperature control means for controlling a heating temperature.

10. (Withdrawn - Currently Amended) The treatment
instrument according to claim 1, wherein the heat generating
portion is provided at only ~~one of the pair of grasp members the~~
first grasp member.

Claims 11-20 (Canceled).

21. (Withdrawn - Currently Amended) ~~A medical~~ The treatment instrument according to claim 1, used for coagulating and cutting the patient's body tissue, the medical treatment instrument comprising:

5 ~~a treatment portion disposed at the distal end of the treatment instrument, the treatment portion being supported capable of being opened and closed, comprising a pair of grasp portions for grasping the patient's body tissue;~~

10 ~~a frontal operating portion disposed at the proximal end of the treatment instrument, the operating portion operating the pair of grasp portion to be opened and closed;~~

15 ~~a heat generating portion provided at least one of the grasp portions, the heat generating portion being current carried to coagulate a patient's body tissue grasped between the grasp portions; and~~

~~a cutting portion disposed at the each grasp portion to cut the patient's body tissue;~~

20 ~~wherein the cutting portion is protruded on one side of the grasp portions in the treatment portion the other side of the grasp portions, and comprises a heat treatment protrusion portion for thermally treating the patient's body tissue which protrudes from the first grasp member toward a second grasp member of the~~

25 ~~pair of grasp members, and wherein a receiving portion formed is provided at the other side of the grasp portions and receiving second grasp member to receive the heat treatment protrusion portion.~~

Claim 22 (Canceled).

23. (Withdrawn - Currently Amended) ~~A medical~~ ~~The~~ treatment instrument according to claim 1, used for coagulating and cutting the patient's body tissue, the medical treatment instrument comprising:

5 ~~a treatment portion arranged at the distal end of the treatment instrument, the treatment portion being supported capable of being opened and closed and comprising a pair of grasp portions for grasping the patient's body tissue;~~

10 ~~a frontal operating portion disposed at the proximal end of the treatment instrument, the operating portion operating the pair of grasp portions to be opened and closed; and~~

15 ~~a heat generating portion provided at least at one of the grasp portions, the heat generating portion being current carried to coagulate the patient's body tissue grasped between the grasp portions,~~

wherein the heat generating portion is ~~heater~~ means ~~consisting of~~ comprises an insulation material.

24. (Withdrawn - Currently Amended) The treatment instrument according to claim 23, wherein the heater ~~means is portion comprises~~ a ceramic heater having a heat transmitting portion made of ceramic and a heating element provided in ~~this~~ 5 the heat transmitting portion.

Claims 25-48 (Canceled).

49. (Currently Amended) A coagulating/cutting system comprising:

a medical instrument used to coagulate and incise a living tissue; and

5 a control element for controlling operation of the medical instrument,

wherein the medical instrument comprises:

a first engaging portion comprising a protrusion having a first engaging surface;

10 a second engaging portion having a second engaging surface which is adapted to cooperate with the first engaging surface to hold the living tissue;

a holding drive element which is operable to move the first and second engaging portions toward and away from each 15 other to hold the living tissue; and

a heating unit which is provided in the first engaging portion in contact with the protrusion, and which heats the ~~first~~ engaging portion protrusion when energized; and

wherein the control element comprises:

20 a current supply element for supplying current to the heating unit;

a first setting element for adjusting the current supply element to set a temperature of the heating unit to a temperature at which the living tissue is coagulated when the 25 living tissue is held between the first and second engaging surfaces; and

a second setting element for adjusting the current supply element to set a temperature of the heating unit to a temperature at which the living tissue is incised when the living 30 tissue is held between the first and second engaging surfaces; and

35 wherein the first engaging surface is shaped such that the medical instrument is only capable of incising the living tissue when the temperature of the heating unit is set to the temperature at which the living tissue is incised.

50. (Previously Presented) A coagulating/cutting system according to claim 49, wherein said control element further comprises a set state changing element capable of changing a set

state of the current supply element set by at least one of the
5 first and second setting elements.

51. (Previously Presented) A coagulating/cutting system according to claim 49, wherein said control element includes a first switch for driving the current supply element set by the first setting element and a second switch for driving the current supply element set by the second setting element.

52. (Currently Amended) A coagulating/cutting instrument used to coagulate and incise a living tissue, comprising:

a first engaging portion comprising a protrusion having a first engaging surface ~~comprising a protrusion~~;

5 a second engaging portion having a second engaging surface which is adapted to cooperate with the first engaging surface to hold the living tissue;

a holding drive element which is operable to move the first and second engaging portions to hold the living tissue, and

10 a heating unit which is provided in the first engaging portion in contact with the protrusion and which heats the first engaging portion protrusion when energized;

wherein the first engaging surface is shaped such that the coagulating/cutting instrument is capable of incising the living

15 tissue held between the first and second engaging portions only
when the protrusion is heated by the heating unit.

53. (Currently Amended) A coagulating/cutting instrument according to claim 52, wherein ~~said protrusion has~~ the first engaging surface comprises an elongate flat surface opposed to the second engaging surface.

54. (Currently Amended) A coagulating/cutting instrument according to claim 52, wherein ~~said~~ the first engaging surface ~~has~~ comprises an elongate curved surface curved in a shape of a substantially circular arc.

55. (Original) A coagulating/cutting instrument according to claim 52, wherein said second engaging portion includes a receiving member formed of a resin.

56. (Previously Presented) A coagulating/cutting instrument according to claim 55, wherein said resin comprises a flexible material.

57. (Previously Presented) A coagulating/cutting instrument according to claim 52, wherein said second engaging portion includes a receiving member formed of rubber.

58. (Previously Presented) A coagulating/cutting instrument according to claim 52, wherein said second engaging portion includes a receiving member formed of gel.

59. (Previously Presented) A coagulating/cutting instrument according to claim 52, wherein said second engaging portion includes a receiving member formed of fluoroplastic.

60. (Previously Presented) A coagulating/cutting instrument according to claim 55, wherein said receiving member has a groove at a portion thereof in contact with the first engaging surface.

61. (Currently Amended) A surgical instrument, comprising:
a distal end portion including a pair of holding portions for holding a living tissue, each of said holding portions having a contact surface that is adapted to be brought into contact with 5 said living tissue; and

a manual operating portion for opening and closing said holding portions;

wherein one a first holding portion of said pair of holding portions comprises a heat generating portion which generates 10 heat, and a protrusion which comprises the contact surface of the first holding portion and which is in contact with the heat

generating portion to be heated by the heat generating portion;
~~that is conducted to the contact surface,~~ and

15 ~~having the heat generating portion~~ has a contact area with the
living tissue that is smaller than a contact area with the living
tissue of the contact surface of ~~the a second~~ holding portion of
the pair of holding portions that does not include the heat
generating portion, and the protrusion is shaped such that the
20 surgical instrument is capable of incising the living tissue only
when the protrusion is heated by the heat generating portion.

62. (Currently Amended) The surgical instrument according
to claim 61, wherein the contact surface of the first holding
portion ~~having the heat generating portion~~ is arcuate in cross
section.

63. (Currently Amended) The surgical instrument according
to claim 61, wherein the contact surface of the second holding
portion, ~~that does not include the heat generating portion,~~ which
is arranged to face the contact surface of the first holding
portion, ~~having the heat generating portion,~~ is formed of a heat
insulating material.

64. (Previously Presented) The surgical instrument according to claim 61, wherein said holding portions are curved from a distal end toward a proximal end thereof.

65. (Currently Amended) The surgical instrument according to claim 61, wherein the contact surface of the second holding portion, ~~that does not include the heat generating portion~~, which is arranged to face the contact surface of the first holding portion, ~~having the heat generating portion~~, comprises a slip preventing portion.

66. (Currently Amended) The surgical instrument according to claim 61, wherein a coating for preventing sticking of heated living tissue is applied to an outer surface of said first holding portion ~~having the heat generating portion~~.

67. (Currently Amended) The surgical instrument according to claim 61, wherein the contact surface of the second holding portion, ~~that does not include the heat generating portion~~, which is arranged to face the contact surface of the first holding portion, ~~having the heat generating portion~~, comprises a second heat generating portion that is rectangular in cross section.

68. (Currently Amended) The surgical instrument according to claim 61, wherein the second holding portion, ~~that does not include the heat generating portion,~~ which is arranged to face the contact surface of the first holding portion, ~~having the heat generating portion,~~ comprises a chamfered portion in which both edge portions of the contact surface are cut to form an obtuse angle.

5 69. (Currently Amended) The surgical instrument according to claim 61, wherein the contact surface of the second holding portion, ~~that does not include the heat generating portion,~~ which is arranged to face the contact surface of the first holding portion, ~~having the heat generating portion,~~ comprises a flexible heat insulating material.